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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,191	07/21/2003	Kenneth J. Micklash II	36-000101US	7717

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EXAMINER

LEVKOVICH, NATALIA A

ART UNIT	PAPER NUMBER
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1743

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary	Application No. 10/624,191	Applicant(s) MICKLASH ET AL.	
	Examiner Natalia Levkovich	Art Unit 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-29, 31-33, 35-39, 72-83 and 85-109 is/are pending in the application.
- 4a) Of the above claim(s) 72-83 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-29, 31-33, 35-39 and 85-109 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-8, 10-29, 31-33, 35-39, 72-83 and 85-109 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08).
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendments and remarks dated 10/20/2006 have been acknowledged by the Examiner.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Claim Rejections - 35 USC § 112

3. Claims 1-8, 10-29, 31-33, 35-39 and 85-101 are rejected under 35 U.S.C. 112, second paragraph, as being unclear for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In the amended claim 1, line 4, 'substantially continuous recessed region', is unclear. An element cannot be 'substantially continuous' (which is substantially analogous to a person being, for example, 'substantially pregnant'), it can be either continuous, or discontinuous. Also see claims 35-36.

Additionally, the new limitation in claim 1, the 'bottom lid presses a bottom gasket....when the parallel reaction device comprises the bottom gasket, is unclear.

The amended claim 85 now recites a 'band that comprises one or more band portions' which is unclear. Is Applicant intending to claim a continuous or discontinuous band? See also claims 36, 94. As was discussed in the prior Office Action in reference

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to claims 85 and 94, the structural inter-relationships between the band and lids are not distinctly set forth. Does the band also form the body of the block? Additionally, in claim 94, line 6, the 'four sides of the reaction block' lack antecedent basis since they are not clearly set forth in the preceding lines. The instant claim recites a reaction block formed by three elements: a band (that is, a 'thin, flat strip of a material' that appears to form a side wall), a top lid and a bottom lid. In this connection, it is unclear how the band can be 'configured to be disposed on the sides of the block (formed by the band).

Claim Rejections - 35 USC § 103

4. Claims 1-2, 6-8, 10-29, 31-33, 35-39 and 85-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanchfield et al. (US 6054100) in view of Sanadi (US 5516490).

As was previously discussed, Stanchfield discloses a multi-well synthesis and filtration apparatus comprising a multi- well synthesis block ['reaction block' – Ex.] with flowthrough wells fitted with filter disks, an upper cover ['top lid' – Ex.], a lower cover ['bottom lid' – Ex.], and a pair of gaskets disposed between the covers and the synthesis block (Abstract; Col.1, line 10; Col. 6, line 65).

The block has an upper surface, a lower surface and four sides (see Figure 1). Each of the four sides of the block have continuous recesses 37, best shown in Figures 4-5. The top gasket 18 is positioned 'proximal to the upper surface of the reaction block' (Figure 1).

"The synthesis block includes a skirt ['band' – Ex.] which protrudes about the periphery of the block at mid-level"(Col.4, line 30).

As shown in Figure 8, the covers include fastening clips 366, 368 ['attachment components' – Ex.].

Stanchfield does not teach the top lid to comprise protrusions for pressing the top gasket. Sanadi discloses a multi-well plate assembly "which prevents cross-contamination of specimens through the use of a resilient gasket which covers a majority of the top of the plate and is compressed by a lid. It thus provides a sealing assembly for arrays of containers of any size or shape" (Abstract). Figure 14 illustrates an embodiment comprising lid 286 which has projections, or annular collars 284. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed such protrusions in the lids or / and gaskets in the modified assembly of Stanchfield, in order to reduce cross-contamination.

With respect to claim 8, Stanchfield discloses, as shown in Figure 3, outlet spouts 40 having a smaller inner cross-sectional dimension than 'other regions of the reaction well', and an abrupt transition area between the outlet spout and the 'other regions'.

Regarding claims 12-15, 85-86 and 94-95, latches, hinges, clips and the like are well recognized equivalents commonly used in the art. For example, Figure 1 of the Stanchfield reference depicts latches / clips 66 and 68 disposed on the top and bottom covers. The latches include pivotably rotatable parts ['hinges' – Ex.].

Referring to claims 19 and 25-26, Stanchfield teaches that the apparatus can be made of polypropylene plastic, or other materials, such as other thermoplastics as Teflon, metals, and of combination of materials "permanently or removably joined or fitted together" (Col.9 lines 45-50).

As to claims 29, 31 and 104-105, although Stanchfield does not teach apertures in the lid, covers with holes are routinely used in the art. See, for examples, Figure 7 of the Sanadi reference showing top cover 132 having an array of openings, the bottom portion of the openings 144 being tapered. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed apertures in the lids in the modified assembly of Stanchfield, in order to provide compatibility with a dispensing device.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stanchfield in view of Sanadi, and further in view of Cargill et al. (US 5770157). Although Stanchfield does not teach cavities disposed between inlet portions of the reaction wells, these elements are commonly used in the art. See, for examples, Figure 9 of the Cargill reference showing an additional array openings 176 disposed between the inlets 171. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed additional cavities / apertures between the wells in the modified assembly of Stanchfield, in order to provide extra means for reducing cross contamination.

6. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanchfield in view of Sanadi, and further in view of Bach et al. (US 6413780).

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Although Stanchfield does not teach reaction wells having different cross-sections, wells shaped as 'polygon, a triangle, a square, a rounded square, a rectangle, a rounded rectangle, a trapezoid, a circle, and an oval ' are well known in the art (see, for examples, Figures 12 A-O of the Bach reference, Figure 12 B showing a vessel with different inner and outer cross-sections), and, in fact, are considered to be art recognized equivalents. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed wells of any of the above discussed shapes, in the modified assembly of Stanchfield, in order to meet particular requirements for conducting chemical reactions.

Response to Arguments

7. Applicant's arguments dated 10/20/2006 have been fully considered but they are not persuasive and moot in view of new grounds of rejection.

Applicant argues that 'the cited art does not teach or describe reaction block having a substantially continuous recessed region disposed in the four sides of the block. Examiner disagrees. Stanchfield, for example, discloses each of the four sides of the reaction block 12 having a continuous recess 37 (see Figures 1, 4 and 5).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Levkovich whose telephone number is 571-272-2462. The examiner can normally be reached on Mon-Fri, 8 a.m.-4p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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